

PVRC NEWSLETTER JANUARY 1996

From: Jan 2 14:41:52 1996
Date: Tue, 2 Jan 1996 05:42:45 -0800
From: Pete Smith
To:
Subject: Jan NL - Urgent

Following is the January NL. Due to Christmas travels, the production dept. (ND3F) has been unavailable. I'd like to be able to announce on the cluster that it's up on the PVRC Web Page (maybe we can eventually get our mail subscription list down to just a few (?)). Anyhow, it's important because the meeting location is NOT Marshall High School, but rather the Vienna Public Library.

Thanks!

PVRC NEWSLETTER JANUARY 1996

OFFICERS

PRESIDENT	KE3Q	RICH BOYD	(301) 464 8014
VICE PRESIDENT	KF3P	TYLER STEWART	(301) 414-5444
SECRETARY	WA3WJD	BRIAN MCGINNESS	(301) 652 6768
TREASURER	N3KTV	JIM HORTON	(301) 258 9731
HISTORIAN	K3SA	STEVE AFFENS	(301) 774-0558

PVRC Charter Members: W3GRF (SK), W3IKN, W4AAV (SK), W4KFC (SK), W4KFT, N0FFZ, W4LUE, W7YS, VP2VI (W0DX).

PacketCluster Contest/DX System

K3NA	Frederick MD	145.63 MHz
W3LPL	Glenwood MD	145.59 441.250 MHz
KE3Q	Bowie MD	145.57 445.375 MHz
N3RR	Rockville MD	145.51 441.325MHz
N4OHE	Mt. Weather VA	145.71 440.925 MHz
N4SR	Woodbridge VA	145.75 MHz*
WR3L	Baltimore, MD	145.61 MHz
K4FJ	Mt. Vernon, VA	145.77 Mhz*

* These nodes are separately operated and funded by the Rappahannock DX PacketCluster Group. The others listed are sponsored by the Potomac Valley DX Spotting Network.

PVRC on Internet - visit the PVRC Home Page, courtesy of K3SA, at:
<http://www.access.digex.net/~k3sa/pvrc.html>

Donations to keep PVRC running: This is the first year that PVRC is being funded entirely by donations. That means no more mandatory \$10 dues. It should be obvious, though, that without your donations the treasury will soon be exhausted. The Newsletter alone costs over \$100/month in postage and reproduction costs. So please, please, please send your donation - hopefully at least \$10 - to Jim, N3KTV, at 8527 Calypso Lane, Gaithersburg MD, 20879-1522. Make checks payable to PVRC. And thanks!

Newsletter Editor: Effective with the next issue, Dick Wilder, K3DI, will

take over as Newsletter Editor. Dick can be reached on the Internet as [\[email protected\]](#), by phone at (410) 757-6706, fax 757-6720, or by USPS at 913 Shore Acres Rd, Arnold, MD 21012.

I've enjoyed my year as Newsletter Editor, even though it's my idea to leave the job now. I just have too much on my plate to continue, both in terms of developing post-Government options and figuring out what I want to do in my third career, and because of the 5-hour commute from West Virginia to downtown DC, which I face for another five months, anyway. Let thank everyone for your help and support over the past year. Hope to see you on the air, and at club meetings as well.

73, Pete N4ZR

Next Meeting: Monday, January 8, 7:30 PM, at the Vienna Public Library, Vienna, VA. Take the Beltway to VA Route 123 South (Chain Bridge Road at this point). Cross over Route 7 and pass Tyson's Corner. On right will be JKJ Chevrolet. Continue on 123 into Vienna where 123 becomes Maple Avenue. After passing Beulah Road (on right w. light), look for Park Street (abt 3 blocks). Park Street has a light. The Library will be a long one block on the left, just before Center Street. Entrance to the library parking lot is a left off 123/Maple. The lot is just before the library itself.

Alternatively, if you take I 66 off the beltway, and exit at Nutley Street toward Vienna, you will run into Maple Ave. A right turn takes you into town. The library will be on your RIGHT just after Center Street. Going this way, you will not have to make a left turn into the parking lot across heavy double lanes traffic.

Pizza after the meeting: Leaving the library, return to Route 123. Go north to Route 7 (Leesburg Pike) and turn onto westbound Route 7. Go a short distance to the light at International Drive. One block after the light, turn right onto Watson Street. Pizza Hut is halfway up the hill on your left.

PVRC Awards Program -- PSE QRX

The organizers are still working out some of the specifics, so stand by ... once things are in place, they plan to move quickly, and the first set of awards are still planned for this spring.

Don't Forget -- ARRL VHF Sweepstakes January 20-21

This event has a club competition, so don't forget to participate if you can, and send in your score for PVRC.

WRTC Progress Report

from the WRTC Committee at NCCC

Now that many of the World Radiosport Team Championship (WRTC-96) teams are starting to come together, we thought the contesting fraternity might be interested in an interim status report.

Here are the folks who have been selected so far: From the USA, PVRC has selected KF3P; SEDXC is K4BAI; SMC is WX3N; NCCC is N6TV; and MRRC is K8CC. These team leaders now are scouting around to select their partners (who cannot come from the same contest club as the team leader).

In addition, SCCC, NCC and FRC have selected team leaders who already have selected their partners. These complete teams consist of K6LL + N2IC; K3LR + WA8YVR; and W2GD + W0UA. We understand YCCC is selecting a team leader now, but they have not yet informed us who it is.

Internationally, Team Spain #1 is EA4KR and Spain #2 is EA7TL; United Kingdom is G3OZF; Italy #1 is IT9BLB and Italy #2 is IK2GSN; Lithuania is LY2IJ + LY1DS; Belgium is ON6TT + ON4WW; Brazil is PY5CC + PY0FF; Slovenia is S59A + S56A; Sweden is SM3DMP; Poland #1 is SP6AZT + SP9FKQ and Poland #2 is SP9IJU + SP9HWN; Russia #1 is UA3DPX + RZ9UA and Russia #2 is RV1AW + RW1AC; Ukraine is UT4UZ + UT1IA; Canada #1 is VE7NTT + VE7CC and Canada #2 is VE3EJ; Yugoslavia is YU1RL + YT1AD.

Team leaders who have not yet selected their partners have until February 15 to make those selections. Invited countries which have not yet notified us of their selections are Germany, France, Hungary, Japan, Norway, Argentina, Bulgaria, Czech Republic, Slovak Republic, Denmark, Netherlands, and Australia.

Finland has informed us that they definitely are sending a team and it will be comprised of the winners of an on-site competition being held in connection with their annual SARL meeting in February.

The team of K1AR + K1DG will be returning as Defending Champions from WRTC-90.

There also will be at least six wild-card teams which will be selected after the Invited Country team selections have been completed. Wild-card teams provide an opportunity for testers who are not residents of Invited Countries, and for residents of Invited Countries who were not otherwise selected, to participate in WRTC-96. Anyone interested in being selected for a wild-card team should send a list of his/her qualifications (and you get to decide what you want to tell us about -- there is no "form" to fill out) to the WRTC-96 Team Selection Committee at Post Office Box 1, Los Altos, CA 94023-0001, USA or via e-mail to [\[email protected\]](#).

The judges for WRTC-96 read like a who's who of testers: K4VX (Chief Judge), G3SXW, I2UIY, JA7RHJ, K3ZO, K4XU, K5RC, K6NA, N2AA, N6AA, N6IP, N6ZZ, OH2MM, OK2FD, ON4UN, PY5EG, S50A, UA9BA, W0UN and W7RM. These gentlemen certainly should be able to keep all the competitors in line!

We here in Northern California are really excited about how well plans for WRTC-96 are falling into place. Remember, too, that you do not have to be a competitor or judge to be welcome at this event. We are planning a series of activities open to everyone, so mark your calendars for July 10 - 16, 1996 and come join the fun.

If you want more info about WRTC-96, contact Rusty Epps, W6OAT via postal mail at 651 Handley Trail, Redwood City, CA 94062, USA or via e-mail at [\[email protected\]](#).

73 de the WRTC-96 Committee

Station Notes

Charter member N4KFT (by e-mail- his address is [\[email protected\]](#)) - He writes:

Just a thought, how about publishing a list of every member who has an e-mail address? Still have my extra class license but am not active. The Internet would be a nice way to keep in touch when not on the air.

Wish the club lots of luck in the upcoming contests and hope every one has a good Thanksgiving and a Happy Christmas. 73 Nort W4KFT

KF3P - Tyler also reminds that the North American QSO Party is coming up, with CW the evening of the 13th and phone the evening of the 20th. There is a team competition with up to 5 members per team. If anyone is interested

in teaming up for CW, Tyler will assemble a team or teams for that mode. Since he'll be VHFing during the phone NAQP, he'll leave that mode to someone else.

N3JT - Jim and Nina, N3JT and KE4PSV, took two weeks' holiday, enjoying Paris during part of the recent strikes thanks to the hospitality of F6BEE, F5SEE, F5TO, and F6BWF. They then went to Madrid, Cordoba, Granada and Sevilla, visiting EA4KA and EA7CEZ. Jim operated briefly from both countries.

N4MM - John reports that he won the UBA (Belgium) SSB contest for North America. Score 13580. He also won the 1995 New Jersey QSO Party for Virginia.

John complains that he doesn't win much any more because he's on the hamfest circuit and never around home on weekends.

K3IXD - Ed recounts what he describes as a Thirty-Mile Expedition. Here, in his words, is the story:

Thanks to the hospitality of the Voice of America Amateur Radio Club and its president Al Brown, (WA3FYZ) Brian Carney, KD4QVT, and I were able to undertake a mini-expedition to DC and give out that section in the recent ARRL 10-meter contest. We contributed 20,720 points towards the aggregate PVRC score in the club competition. The K3VOA shack is located on the seventh floor of the VOA Administrative Headquarters Building in SW DC. From the shack there is a lovely view of the capitol. On the roof top, for HF, they have a 3 element beam and a multi-band vertical. The rig is a TS-440S and a SB-200. We used their packet station to tie into the PVDXSN PacketCluster (tm). Given that the sun spot numbers are low, we didn't plan on beginning to operate until 9 or 10 Saturday morning. That was fortunate planning since a snow storm hit the DC area on Friday night. Driving the 30 miles from my QTH on Saturday morning wasn't too bad. But we did shut down late Saturday afternoon and again on Sunday afternoon in order to drive home before the roads iced up.

PVRC Tidewater (Southeast Virginia) Regional Meeting
21 November 1995

An organizational meeting of the Tidewater Region of the Potomac Valley Radio Club was convened at 2045, 21 November 1995 at the Diamond Restaurant, Norfolk, Virginia, following the monthly meeting of the Virginia DX Century Club.

The meeting was presided over by Don Lynch, W4ZYT. In attendance: N4AIG, WD4GOY, K4IX, W4DHz, KG4O, W4PRO, W4HW, W1WTG, W8RJL, KC4WQO, KE4HTT, WS9B, NW3K, WD4CNQ, KO4MR, W4IF, WB4DNL.

Application forms were distributed. The general concept of the PVRC regionalization was discussed, and Walt W4HW, a member of PVRC and now a Virginia Beach resident, spoke briefly about PVRC participation and benefits.

A second organization meeting was planned following the December, 1995 Virginia DXCC monthly meeting. Adjournment followed at 2110.

The second organizational meeting of the PVRC Tidewater (southeast Virginia) Region was held at the Diamond Restaurant, Norfolk, on December 19, 1995, following the monthly meeting of the Virginia DX Century Club.

The meeting was called to order at 2040 by W4ZYT. In attendance: WD4GOY, K4IX, W4DHz, KG4O, W4PRO, W4HW, W1WTG, W8RJL, KC4WQO, KE4HTT, WS9B, NW3K, WD4CNQ, KO4MR, WB4DNL. N4AIG was out of town, but had sent along his application form, as had W4IF, who was ill.

Applications were received from: W4ZYT, N4AIG, W4IF, W4PRO, K4IX, NW3K, W1WTG, W4HM, WB4DNL, WD4GOY, WD4CNQ and KO4MR. These will be forwarded to the PVRC Secretary for action.

A brief discussion of contest participation for 1996 and log reporting procedures ensued. It was determined to set dues at current paid-up membership in the VaDXCC for the present.

The meeting was adjourned at 2105.

Next NW Regional Meeting

The next NW Regional meeting will be at Legends Restaurant in Frederick MD on the third Tuesday, January 16th at 8PM. Refreshments and dinner are served starting at 6PM. Program TBA. Discussion to include the NAQP CW wrapup and upcoming NAQP Phone and VHF Sweepstakes contests. As usual, show-and-tell items are encouraged.

The PVRC Exchange
by Ed Steeble, K3IXD

AA3HM has received the QSL cards from the printer and probably has distributed most of them by the time you receive this newsletter.

I plan on placing the order for the PVRC logo mugs before the New Year, thanks to a surge of late orders, and expect to distribute the mugs at the February meeting.

I have forgotten to thank AA4XU, Ben, for the excellent art work and quick response to my requests as I talked with the supplier of our mugs. His efforts saved the club a hefty art-work fee.

Future plans for T-shirts, hats, and golf shirts are uncertain. I didn't get any replies to my request for ideas, no one offered to help, and I am not sure that the club members would order the minimum required: 18 shirts, 18 hats.

Several people have suggested that the hats, golf shirts, and T-shirts be offered in some other color than white. White was originally chosen because it kept the costs down. Using white as the background meant we only had to pay for the red and blue printing. If we went to another color, such as light grey or light blue, we would then have to pay for three colors, plus a new, one time, set up fee.

PVRC name badges can be ordered at anytime. To order a badge provide your call sign, your name as it is to appear on the badge, ad \$5 (or \$6 if you want it mailed to you instead of picking it up at a club meeting). Mail a check (payable to Brian McGuinness) to WA3WJD, Brian McGuinness, 4618 DeRussey Pkwy, Chevy Chase, MD 20815.

Dealing with RFI
By Bill Hider, N3RR

Editor's note: The following was originally posted on the CQ-CONTEST Internet reflector, but I thought it was of such general PVRC interest that I asked Bill for permission to reprint it here. Bill was replying to another PVRC'er, Ken, KP4XS, who reported problems working with his neighbors to fix RFI. Bill wrote:

Ken, I'm going through a similar situation...TVI with 3 neighbors and PHONEI with 2 of them.

I obtained the FCC Bulletins on Telephone interference and the FCC interference handbook (addresses and URL later in this message) and gave the neighbors a copy, explained that it's not my responsibility to fix their non-state-of-the-art equipment, but in the interest of good neighborly relations I would provide them with a TVI filter and phoneI filter to allow one phone to work when the RF environment makes the phone not suitable to telephone communications, constantly emphasizing that I am going beyond what is required by the FCC by providing them with the filters.

I first asked their permission to enter their house and help them troubleshoot and identify the type of interference they are experiencing.

I then gave them the discussion above and a copy of the following two FCC publications: ---- Information Bulletin, FCC Field Operations Bureau, Telephone Interference, FOB Bulletin No. 10, Published 1987, REVISED EDITION, June 1992 ---- FCC Interference To Home Electronic Entertainment Equipment Handbook, Compliance & Information Bureau (CIB), Bulletin CIB-2, May 1995 ----- Both of the above publications can be obtained in quantities, free, by sending a request with the publication numbers and your mailing address to:

Federal Communications Commission
FORMS DISTRIBUTION CENTER
2803 52nd Avenue
Hyattsville, Maryland 20781

The Interference Handbook is also available on the World Wide Web, in living excellent color at the following URL: <http://www.fcc.gov/Bureaus/Compliance/WWW/tvibook.html> (Note that this URL is case sensitive).

I printed this one on a laser printer with excellent results.

After explaining the above, I bought the K-COM plug-in filters which I gave one set to one of the neighbors telling them that they now had one phone (and a set of filters that they could move from phone to phone if they desired) that was interference-free. They also had a wireless 48 MHz phone which I told them was not covered by the FCC rules and that there was nothing that could be done to filter them. (By the way, the the FOB Bulletin No. 10 makes this abundently clear). After installing a high pass filter in their antenna downlead cable, just prior to their broadband preamp, then installing the K-Com filters, they said: "So now, Bill, I suppose you want us to leave you alone and not call you anymore with our interference complaints?"...I said: "Yes."...They agreed!!

I also implemented this sequential approach with the other neighbors: 1) Explain the technical situation [Ham radio equipment not at fault]; 2) Told them I will help troubleshoot and that I might have a filter that will work if they let me work with them, but in any event I am going beyond what is required; 3) Installed filter to fix TVI; 4) Installed filter to fix one phone they can use in emergency to make calls if interference is present.

When the TVI got complicated by multiple TVs or console/imbedded broadbandwidth pre-amps on TV signal, I fixed one TV, and explained the technical problem with the others. This has worked with me on two of the neighbors.

I also enlisted the help of a fellow ham (Thanks N3KTV) to be at my house operating my HF rig while he and I coordinated on 2M handheld to check out all bands using maximum power allowed, SSB, antennas pointed at the

neighbors' house. This while checking out all TV channels in the area as well as the telephone. I created a matrix of Hamband/TV channels to note interference found before I actually went inside the other house.

Another trick I learned from K3GEG: I set up my HF station (IC-781/IC-4KL) VOX close to my shack 2M rig, so that if I didn't have another ham's help, I could generate HF SSB by using my 2M handheld at the neighbor's house while watching/listening for interference.

The FCC Bulletins explain in layman's language why the Ham/CBer/FM station, etc is not at fault. I GAVE THEM A COPY OF THESE FCC PUBLICATIONS.

Oh, I also implemented highpass filters on my home TV antenna cable and on the Cable-TV leadin cable. I used the Radio Shack 75 Ohm highpass filter (\$4.99). I have no TVI at home, from my HF gear. I also bought a Lowpass filter installed after my HF amp. I installed K-Com filters in my house wiring to eliminate PHONEI as well.

I think it is important to be able to tell any complaining neighbor that I don't have any interference.

Anyway, that's the approach I took and will take in the future. The above is merely my opinion and the way I handled it. I'll be glad to respond to any queries.

Bill, [\[email protected\]](#)

WA7BNM's CONTEST CALENDAR

Dec. 7, 1995 Edition

January, 1996

ARRL RTTY Roundup	1800Z, Jan 6 to 2400Z, Jan 7
Japan Int.DX Contest, 160-40m	2200Z, Jan 12 to 2200Z, Jan 14
North Amer. QSO Party, CW	1800Z, Jan 13 to 0600Z, Jan 14
North Amer. QSO Party, Phone	1800Z, Jan 20 to 0600Z, Jan 21
ARRL January VHF Sweepstakes	1900Z, Jan 20 to 0400Z, Jan 22
CQ 160-Meter Contest, CW	2200Z, Jan 26 to 1600Z, Jan 28
UBA Contest, Phone	1300Z, Jan 27 to 1300Z, Jan 28
QRP ARCI Novice/Technician Roundup	0000Z, Jan 27 to 2400Z, Feb 4
Club Competition	

February, 1996

North American Sprint, Phone	0000Z-0400Z, Feb 3
North American Sprint, CW	0000Z-0400Z, Feb 10
Dutch PACC Contest	1200Z, Feb 10 to 1200Z, Feb 11
ARRL School Roundup	1300Z-0100Z each day, Feb 12 to Feb 16
ARRL Inter. DX Contest, CW	0000Z, Feb 17 to 2400Z, Feb 18
**** Club Competition	
CQ 160-Meter Contest, Phone	2200Z, Feb 23 to 1600Z, Feb 25

March, 1996

ARRL Inter. DX Contest, Phone	0000Z, Mar 2 to 2400Z, Mar 3
**** Club Competition	
CQWW WPX Contest, Phone	0000Z, Mar 30 to 2400Z, Mar 31
****Club Competition	

April, 1996

Japan Int.DX Contest, 20-10m	2300Z, Apr 12 to 2300Z, Apr 14
ARRL 144 MHz Spring Sprint	1900-2300 local time, Apr 15

ARRL 222 MHz Spring Sprint	1900-2300 local time, Apr 23
May, 1996	
ARRL 432 MHz Spring Sprint	1900-2300 local time, May 1
ARRL 902 MHz Spring Sprint	0600-1300 local time, May 11
ARRL 1296 MHz Spring Sprint	0600-1300 local time, May 11
ARRL 2304 MHz Spring Sprint	0600-1300 local time, May 11
ARRL 50 MHz Spring Sprint	2300Z May 18 to 0300Z, May 19
CQWW WPX Contest, CW	0000Z, May 25 to 2400Z, May 26
**** Club Competition	
June, 1996	
ARRL June VHF QSO Party	1800Z, Jun 8 to 0300Z, Jun 10
ARRL Field Day	1800Z, Jun 22 to 2100Z, Jun 23
July, 1996	
IARU HF World Championship	1200Z, Jul 13 to 1200Z, Jul 14
August, 1996	
ARRL UHF Contest	1800Z, Aug 3 to 1800Z, Aug 4
ARRL 10 GHz Cumul. Contest	0800-2000 local time, Aug 17 and Aug 18
September, 1996	
ARRL September VHF QSO Party	1800Z, Sep 14 to 0300Z, Sep 16
ARRL 10 GHz Cumul. Contest	0800-2000 local time, Sep 21 and Sep 22
CQ Worldwide Contest, RTTY	0000Z, Sep 28 to 2400Z, Sep 29
October, 1996	
CQ Worldwide Contest, Phone	0000Z, Oct 26 to 2400Z, Oct 27
**** Club Competition	
November, 1996	
ARRL Sweepstakes, CW	2100Z, Nov 2 to 0300Z, Nov 4
**** Club Competition	
ARRL Sweepstakes, Phone	2100Z, Nov 16 to 0300Z, Nov 18
**** Club Competition	
CQ Worldwide Contest, CW	0000Z, Nov 23 to 2400Z, Nov 24
**** Club Competition	
December, 1996	
ARRL 160-Meter Contest	2200Z, Dec 6 to 1600Z, Dec 8
ARRL 10-Meter Contest	0000Z, Dec 14 to 2400Z, Dec 15
**** Club Competition	

Call Book - Paper and CD-ROM - Deal Offered by Mike Klein, KC3NE, of FRC

He says ... I'll have the 1996 Callbooks (paper) & the brand-new 1996 Callbook-on-CD-ROM (BOTH Callbooks, with 250+ countries on 1 disk!). Callbooks are \$24 each, \$48 a set (plus \$3 shipping per TOTAL order). The Callbook-on-CD-ROM is \$33 + \$3 shipping. These are the lowest prices ANYWHERE & are good for USA & possessions.

Shipping starts 11/13. Send check or money order (sri, no credit cards) to:
Mike Klein, Box 306, Cheltenham, PA 19012. (KC3NE's e-mail:
[\[email protected\]](#)).

How Good is Your Ground?
by John Belrose, VE2CV (from the Internet)

Jerry Sevick, W2FMI in the March 1981 issue of QST has described a simple method to measure ground conductivity, which requires a 100 watt electric light bulb, a 14.6 ohm 5 w resistor, four small probes and an ac voltmeter. This method has been used by Doty, Frey and Mills, QST February 1983, who found problems with ground currents, which was resolved by adding an isolation transformer. The measurement is made at the power line frequency (50 or 60 Hz).

With a 100 watt transmitter and an RMS RF voltmeter, it seems to me that one could make measurements at the HF frequency of interest. I am suspicious of the probe method, since for accurate results the soil should make uniform contact with the probe. The probe method is certainly no good for rocky soil. The large apparent conductivity change observed on wet and dry days, and the change from summer to winter is probably also a probe problem.

Many commercial techniques are available and described in the literature [reference Lagg, Earth Resistances, Pitman Publishing, 1964, pp. 206-229].

The method I like and have used is to employ an antenna itself to determine the effective ground conductivity of the earth beneath it. Erect a horizontal dipole dimensioned for the band of interest. Erect it at a low height over the ground (say 1 metre). Do not use end insulators -- use nylon rope. Determine the resonant length of the dipole (reactance zero), and measure the resistance at the resonant frequency. This can be done using a RX Noise bridge right at the antenna using a battery operated receiver; or by measuring at the input end of a length of quality coax that is exactly a half wavelength long. The coax should have ferite beads over the shield of the coax at the antenna end, a W2DU type current balun. You will have to guess at a suitable dielectric constant appropriate to the type of soil in the area.

Using NEC-2 [or EZNEC or NEC-Wires, the two most popular ham implementations - ed.], after some trial and error, you can find the conductivity that best agrees with the resonant length of the dipole and the resistance of the dipole. If you get agreement with both resonant length and resistance you have probably made a good guess at the dielectric constant.

That's all for 1995. See you in the pileups!!!

Pete, N4ZR
73, Pete Smith N4ZR
[\[email protected\]](#)